the blood pressure. He finds that the smoking of two moderately strong cigars is sufficient to produce entirely characteristic variations of blood pressure. During the time of smoking there is a definite increase of the diastolic pressure, and a primary increase of systolic pressure, with a subsequent fall. These alterations are observable for as long as two hours after smoking has ceased. John considers that the result is brought about by the stimulation to contraction produced on the vessel walls, whereby heightened tonus is produced, a fact which has been experimentally determined. Pulse frequency is not always affected in the same way, sometimes the pulse is actually slowed, but usually there are greater variations than are to be observed in a control. Eight to ten Russian cigarettes produced the same result upon the blood system as two moderately strong cigars, and between various kinds of cigarettes very different observations were made. The observer found that even four cigars of a certain brand which he names, did not influence the blood pressure in the slightest, due probably to the fact that they are very poor in nicotine. Eight to ten cigars divided over a day are not entirely without effect upon the blood pressure; but there are so many influences that affect the blood pressure in the course of the daily life, that it is a little difficult to lay the blame definitely upon the tobacco. Cigars poor in nicotine, however, produce decidedly less effect than those which are strong in nicotine; while twenty-five or thirty cigarettes produce an effect scarcely to be distinguished from that of eight to ten moderately strong cigars. John considers that the result of his observations is that a definite influence upon the bloodvessels has been once more proved, and that nicotine is able to produce vascular changes of an arteriosclerotic nature. John goes on further to state that coronary disease should be the signal for an uncompromising attitude against the use of tobacco, and disposes of the argument that many old men with coronary disease smoke enormously without killing themselves, by stating that this does not speak for the harmlessness of tobacco, but for the enormous resistance which certain individuals possess.

Tuberculin in Healthy Animals.—Klopstock (*Zeitsch. f. Exper. Path. u. Ther.*, April, 1913, Band xiii, Heft 1) finds that repeated subcutaneous injections of old tuberculin begun at 0.1 to 5 c.c., and totalling as high as 26 c.c. for a single animal, the doses administered at intervals varying between three days and a month, gave no reaction in the majority of test animals. Six guinea-pigs out of 20 died of peritonitis. Animals so treated with tuberculin showed no increased resistance to subsequent infection by experimental means, nor did the course of the disease or the appearance of the organs at autopsy indicate any differences from control animals. The sensibility of animals first injected with tuberculin and subsequently injected by tuberculosis was found to be diminished. Repeated doses of tuberculin produced no formation of antibodies in healthy guinea-pigs.

Spirochetes.—Arnheim supplements his previous observations upon spirochetes, made at the Robert Koch Institute in Berlin (*Zeits. f. Hyg. u. Infekt.*, 1914, Band lxxvi, Heft 3). He used spirochetes from syphilitic material and some strains of refringens. It needs but a short period of cultivation to develop involution forms, as well as degenerated individuals, and in cultivation the virulence falls very rapidly, so that inoculation of animals from cultivated organisms is very much the exception rather than the rule. Arnheim's experience leads him to realize that the sharp distinction once drawn between pallida and refringens are inaccurate; for in material from animals infected with pallida he finds forms so closely resembling refringens that differentiation is difficult. Insofar as agglutination and precipitation of pallida by specific sera, he found no affirmative evidence at all. Complement fixation by cultivated spirochetes in the serum of syphilitics occurs, of course, but he thinks in a lesser degree of intensity than the Wassermann reaction, and the reactions restrained by non-specific agents are rather numerous. The complement fixation reaction is not quite so dependable as the Wassermann, and both failed occasionally for unknown reasons. When cultivated spirochetes are kept in continuous contact with their poisons, Arnheim did not find that isolated individuals escaped, subsequently to multiply. Arnheim experimented also with swine pest and concludes that it is not caused by spirochetes, but that the spirochetes there discovered are saprophytic.

Lipoid Infiltration.—JASTROWITZ (*Zeits. f. Exper. Path. u. Ther.*, January, 1914, Band xv, Heft 1) publishes from Halle a very painstaking study upon the foregoing subject. The points of interest do not lie so much in the question of the amount of infiltration as the processes of synthesis by which the fat content of organs is made up from simple lipoid substances. It does not simplify the problems that in certain forms of poisoning there occurs a transportation in the blood of fat from the body depots to the great body organs; in fact, this may be so great in amount that it overshadows and hides in severe poisonings the variation in the lipoids of the organs concerned. On the other hand, however, in certain forms of poisoning, such as by arsenious acid and nitrobenzol, the fatty infiltration is slight, and the lipoids can be observed to be much increased in the blood, and in such an organ as the kidney. The phosphatids may at times in an organ be absolutely and relatively decreased, and under yet other circumstances actually increased by reason of the transport of fat by the blood; but at the same time the phosphatids relative to the total lipoids are decreased. In cases of marked fatty infiltration, the amount of lipoids is likely to be great, corresponding to the well-marked anatomical visible change; in infiltration that anatomically appears slight, it does not follow that the lipoid content is correspondingly low.

Notice to Contributors.—All communications intended for insertion in the Original Department of this JOURNAL are received only *with the distinct understanding that they are contributed exclusively to this* JOURNAL.

Contributions from abroad written in a foreign language, if on examination they are found desirable for this JOURNAL, will be translated at its expense.

A limited number of reprints in pamphlet form, if desired, will be furnished to authors, *provided the request for them be written on the manuscript.*

All communications should be addressed to—

DR. GEORGE MORRIS PIERSOL, 1927 Chestnut St., Philadelphia, Pa., U. S. A.